

ON THE PHYTOPHAGOUS AND PARASITIC HYMENOPTERA
COLLECTED BY MR. E. ERNEST GREEN IN CEYLON.

SECOND PAPER.

By P. CAMERON.

THE following species are described in this paper :—

ICHNEUMONINÆ.

1. *Melanichneumon kandyensis*, n. sp.
2. *Hoplismenus ceylonicus*, n. sp.
3. *Haliphera fulvipes*, n. sp.
4. *Aluina erythropus*, n. g. et sp.
5. *Deniya pleuralis*, n. g. et sp.
6. *Tanyphatnus multimaculatus*, n. g. et sp.
7. *Stictichneumon macariæ*, n. g. et sp.

CRYPTINÆ.

8. *Buodias rufipes*, n. sp.
9. *Melcha cinetipes*, n. sp.
10. *Melcha annulipes*, n. sp.
11. *Melcha varibalteata*, n. sp.
12. *Melcha reticulata*, n. sp.
13. *Melcha erythropus*, n. sp.
14. *Melcha maculiceps*, n. sp.
15. *Friona rufipes*, n. sp.
16. *Friona bituberculata*, n. sp.
17. *Fenenias erythropus*, n. sp.
18. *Skeatia acutilineata*, n. sp.
19. *Skeatia cyclosiæ*, n. sp.
20. *Skeatia panthonæ*, n. sp.
21. *Bathythrix rubriornatus*, n. sp.
22. *Bathythrix striatus*, n. sp.
23. *Clitiga excavata*, n. g. et sp.
24. *Clitiga forticornis*, n. sp.
25. *Earrana lutea*, n. g. et sp.

OPHIONIDÆ.

26. *Ophion bicarinatus*, n. sp.
27. *Pleuroneurophion erythrocerus*, n. sp.
28. *Eniscospilus spilonotus*, n. sp.
29. *Eniscospilus melanocarpus*, n. sp.
30. *Eniscospilus xanthocephalus*, n. sp.
31. *Eniscospilus unilineatus*, n. sp.
32. *Eniscospilus dasychiræ*, n. sp.
33. *Eniscospilus horsfieldi*, n. sp.
34. *Spilophion maculipennis*, n. g. et sp.
35. *Paniscus intermedius*, n. sp.
36. *Paniscus orientalis*, n. sp.
37. *Paniscus lævis*, n. sp.
38. *Campoplex greeni*, n. sp.
39. *Limnerium taprobanicum*, n. sp.
40. *Nototrachys reticulatus*, n. sp.
41. *Clatha longipes*, n. g. et sp.
42. *Trichomma nigricans*, n. sp.

TRYPHONINÆ.

43. *Bassus orientalis*, n. sp.
44. *Rhorus spinipes*, n. sp.

PIMPLINÆ.

45. *Epirhyssa ornatipes*, n. sp.
46. *Theronia maskeliyæ*, n. sp.
47. *Erythrotheronia flavolineata*, n. g. et sp.
48. *Echthromorpha ornatipes*, Cam.
49. *Xanthopimpla taprobanica*, n. sp.
50. *Xanthopimpla kandyensis*, n. sp.
51. *Xanthopimpla parva*, n. sp.
52. *Xanthopimpla minuta*, n. sp.
53. *Philopsyche albopalteata*, n. g. et sp.
54. *Lissotheronia flavipes*, n. g. et sp.
55. *Charitopimpla annulipes*, n. sp.
56. *Lissopimpla rufipes*, n. sp.
57. *Tanera annulipes*, n. g. et sp.
58. *Lissonota greeni*, n. sp.

ICHNEUMONINÆ.

1.—*Melanichneumon kandyensis*, sp. nov.

Black, the upper inner orbits, narrowly below, more broadly above, the line extending round the top and narrowly down the upper part of the outer, a short line at the bottom ; a line on the pronotum, two

lines, narrowed in front, on the centre of the mesonotum, the apical half of the scutellum, the mark dilated laterally at the base, post-scutellum and the apices of the second to fifth abdominal segments narrowly, the penultimate more broadly, and the last entirely, yellow; the second segments broadly at the base rufous; antennæ with a broad white band in the middle; legs red; the four front coxæ and trochanters yellow; the hind black, red, and yellow. Wings hyaline, slightly tinged with fulvous, the nervures and stigma black, ♀.

Length 15–16 mm.

Kandy, July.

Head smooth, mandibles red, black at apex. On the centre and on the sides of the clypeus is a reddish mark. Prothorax and mesothorax closely punctured; the scutellum smooth. Median segment more closely and strongly punctured; the apical slope thickly covered with white hair; the areola open at the base, twice longer than broad; the inner side furrowed; it is of equal width throughout and has the apex roundly curved inwardly. Disco-cubital and recurrent nervures broken by a stump of a nervure. Apical half of post-petiole strongly punctured; the gastrocœli shallow, yellowish. Agrees fairly well with *Melanichneumon*. Scutellum not quite flat, depressed at base and apex round, longer than the width at the base.

2.—*Hoplismenus ceylonicus*, sp. nov.

Black; the face, clypeus, the orbits all round, mandibles, palpi, a line on the pronotum, tubercles, two lines on the centre of the mesonotum, the apical half of scutellum, the base of the mark transverse, apex of post-scutellum, and the apices of all the abdominal segments, pale yellow; the apex of the first segment has the line broader than it is on the third and following; on the apex of the second the band is twice the width it is on the first and there is a broader band on its base. Legs red; the four front coxæ and trochanters yellow; the hind coxæ black, the apex red below, above they are yellow. Wings hyaline, the stigma and nervures black. Antennal scape and a broad band on the centre of the flagellum white; the flagellum brownish beneath, especially on the basal half, ♂.

Length 14 mm.

Kandy.

Face and clypeus thickly covered with short, white pubescence and sparsely punctured; labrum white, largely projecting. Promesonotum and scutellum smooth, the latter obliquely sloped at the base and apex. Propleuræ and mesopleuræ smooth. Base of metanotum and areola smooth, the rest strongly punctured; the posterior median area irregularly rugose; the apical slope and metapleuræ

thickly covered with white hair, the latter strongly punctured. Abdomen smooth, except the second segment, which is weakly punctured; gastrocœli smooth, shallow.

This species agrees fairly well with *Hoplismenus*, having the scutellum as in that genus; but the areola is not "wider than long" as in the diagnosis of Ashmead: it is fully longer than wide, open at the base, and the posterior median area projects roundly into it. The lateral teeth are small, but distinct. The clypeus is short, transverse at the apex; the labrum projects.

3.—*Haliphera fulvipes*, sp. nov.

Black; the face, clypeus, mandibles, palpi, upper inner orbits narrowly, the lower half of the outer broadly—more broadly below than above—a narrow line on the pronotum, tubercles, a mark on the tegulæ, scutellum, a line on the centre of the metanotum, rounded and narrowed at the top and bottom, one-third of it in the areola, two-thirds on the posterior median area, a broad line on the first and a narrower line on the second abdominal segment, lemon-yellow. Legs fulvous, the coxæ black; the fore trochanters yellow, the middle yellow, black behind, the hinder entirely black. Wings hyaline, highly iridescent, the nervures and stigma black. Antennal scape yellow, the flagellum fuscous beneath, ♂.

Length 12 mm.

Maskeliya, August.

Face and clypeus distinct, but not very closely punctured, sparsely covered with white pubescence; front and vertex wrinkled irregularly. Mesonotum closely, finely, but distinctly punctured; the scutellum with some scattered punctures. The basal three areas of metanotum finely, closely, irregularly, transversely striated; the lateral almost smooth at the base; the posterior median obscurely striated at the base, the rest strongly transversely striated; the lateral areas with some stout oblique irregular striæ. Propleuræ indistinctly, the mesopleuræ more strongly and closely and the metapleuræ still more closely and strongly punctured, the latter two more or less closely striated. Petiole smooth; the second and third segments closely, but not strongly punctured; the gastrocœli longish, smooth, and shining; the apical segments densely covered with short blackish pubescence; the apical half of the last yellow.

Aluina, gen. nov.

Scutellum rounded, not flat, its basal three-fourths stoutly keeled. Areola longer than broad, wider at the base than at the apex; the keels roundly curved, the apex slightly rounded inwardly; its

surface stoutly striated. Abdominal petiole smooth, shining, impunctate. Ovipositor long, as long as the apical three segments united. Base of flagellum slender, the joints elongate; occiput deeply, widely, roundly incised, sloping above obliquely from the ocelli. Disco-cubital nervure angled in the middle, broken there by a stump of a nervure; the two abscissæ straight, oblique, not rounded.

The head is large; the eyes large, projecting, distinctly narrowed below; the malar space moderate. Apex of clypeus transverse; labrum hidden. Scutellum longer than broad, rounded at the base and apex. Face flat, only slightly dilated in the middle, not separated from the clypeus. Abdomen with the second and third segments punctured; longer than the head and thorax united, its apex acutely pointed.

Allied, in some respects, to *Cillimus* and *Exephanes*. It has the long, projecting ovipositor of the latter, but not its filiform antennæ; but *Exephanes* has not the scutellum stoutly keeled; *Cillimus* has the ovipositor short, has the face tumid, not narrowed behind the eyes; the clypeus is armed at the apex with a small tooth and the scutellum short.

4.—*Aluina erythropus*, sp. nov.

Plate A, fig. 11.

Black; the face, clypeus, the orbits all round, the outer broadly below, a line on the raised centre of the pronotum, scutellar keels, the sides of the scutellum narrowly, the apex more broadly, post-scutellum, the apex of the petiolar area, a broad line on the sides of the apical slope of metanotum, a triangular spot behind the spiracles, the lower edge of the propleuræ, tubercles, a large mark, narrowed in the middle on the lower part of the mesopleuræ, a large oblique mark on the centre of metapleuræ, the base of the first abdominal segment, two spots on its apex, the apex of the second broadly, two broad lines of almost equal width on the third, two shorter, smaller ones, obliquely narrowed on the inner side, the greater part of the sixth and the whole of the apical two, pale yellow. Antennæ black, the under side of the scape and a broad band on the flagellum white. Legs red, the four front coxæ and trochanters yellow. Wings hyaline, the stigma and nervures black, the costa at the base of the stigma fuscous, ♀.

Length 11–12 mm.

Pundalu-oya.

Head smooth and shining, the face and centre of clypeus sparsely weakly punctured; the front in the centre slightly raised, almost keeled. Mesonotum closely punctured, the furrows distinct on the

basal half. Scutellum sparsely punctured. Base of metanotum almost smooth; the areola with four stout, curved, transverse keels, the base and apex with a few broken ones, the lateral area stoutly obliquely, the posterior median transversely striated; the base of the spiracular area punctured, the rest closely, obliquely striated. Apex of propleuræ below stoutly striated, above and at the base punctured; the base in the middle with some stout, clearly separated striæ, the lower part smooth and shining. Abdomen very smooth and shining except the second and third segments, which are closely punctured: the former stoutly striated at the base.

In the example described, one mandible is black, the other yellow.

Deniya, gen. nov.

Temples almost obsolete; occiput almost transverse. Eyes large, projecting. Apex of clypeus rounded, behind not separated from the face. Antennæ dilated beyond the middle. Parapsidal furrows distinct, crenulated. Apex of mesonotum reticulated. Scutellum longer than its width at the base, convex, stoutly keeled to beyond the middle; the apex with an oblique slope. At the base of the post-scutellum are two triangular depressions, bordered by stout keels. Base of metanotum, deeply obliquely depressed at the base. Areola longer than wide, transverse at the base, the apex angularly turned inwardly; the sides near the apex angled. Post petiole and the following four segments closely punctured; gastrocœli large, deep. Areolet 4-angled; disco-cubital nervure not broken by a stump of a nervure; transverse median nervure received behind transverse basal. Sheaths of ovipositor broad, projecting.

This genus comes close to *Aluina*. The two may be separated thus:—

Temples wide, occiput widely, deeply incised, apex of clypeus transverse, transverse basal nervure interstitial; sides of areola rounded, not angled, parapsidal furrows indistinct, the apex of mesonotum smooth, post-petiole smooth, *Aluina*.

Temples very narrow, occiput transverse, apex of clypeus rounded; sides of areola not rounded, angled; parapsidal furrows distinct, apex of mesonotum reticulated, post-petiole punctured, *Deniya*.

5.—*Deniya pleuralis*, sp. nov.

Plate A, fig. 10.

Black; face, clypeus, mandibles, except at apex, palpi, the inner and upper orbits, the lower half of outer broadly, a broad line on the pronotum, tegulæ, scutellum, the sides of the apical slope of the metanotum, a line on the lower edge of the propleuræ, mesopleuræ

from shortly above the middle, mesosternum, tubercles, the apices of all the abdominal segments—the line on the fourth interrupted—pale yellow. Legs pale fulvous, the anterior largely tinged with yellow, the apex of the hind femora, base of hind tibiæ, their apex broadly and the tarsi, black. Wings hyaline, the stigma and nervures black, ♀.

Length 10 mm.

Peradeniya.

Scape below and a broad ring on the flagellum white. Head smooth and shining, the face and clypeus sparsely punctured and haired. Thorax smooth and shining, except the metapleuræ and the spiracular area which are closely strongly reticulated, punctured; the areola with a stout keel in the centre of the apical two-thirds; the metapleuræ thickly covered with white pubescence. Post-petiole and the second to fourth abdominal segments closely punctured.

Tanyphatnus, gen. nov.

♂. Areola open behind, more than twice longer than wide, separated from the lateral areæ, the apex almost transverse, the top of the posterior median area being bluntly rounded. Apex of metanotum with a gradually rounded slope. Scutellum not flat, roundly depressed at the base and apex. Post-petiole in the centre finely, closely, longitudinally striated; gastrocœli deep; there are no thyridia. There are eight abdominal segments; cerci long, stout; the genital armature much larger than usual; the ventral fold extends to the apex of the fourth segment. Areolet 5-angled; the disco-cubital nervure almost broken by a stump of a nervure. Apex of clypeus transverse, not separated from the face; labrum largely projecting. Upper tooth of mandibles much longer than lower, projecting twice the length of the latter beyond it; it is sharply pointed. Spiracles about four times longer than wide.

The temples are moderately broad, rounded; malar space short; the antennæ are not much longer than the abdomen, serrate. Abdominal petiole slender, longish, the post-petiole not clearly separated. Legs moderately stout. Abdomen slender, more than twice the length of the head and thorax united; the sides of the segments spotted with yellow; the last segments not spotted.

This genus, or sub-genus, has the striated post-petiole of *Ichneumon sensu str.* Comparing it with *I. luctatorius*, the type given for *Ichneumon s. str.*, its areola is longer, narrower, and not of equal width, it being wider at the base and narrowed roundly in the middle; the metanotum has a more gradually rounded slope; the first segment of the abdomen is more slender, especially at the apex; the

scutellum is much more distinctly raised—more convex, and clearly longer than wide; the temples are shorter and not so obliquely narrowed, the malar space smaller, the eyes being longer, and the upper tooth of the mandibles is longer and more sharply pointed.

6.—*Tanyphatnus multimaculatus*, sp. nov.

Black, the face, clypeus, mandibles, palpi, the inner orbits, the outer, narrowly above, broadly below, the upper and lower edge of prothorax, prosternum, the sides of scutellum, narrowly at the base, more broadly towards the apex, scutellum, a broad band of equal width on the base of metanotum, extending from the base to the posterior median area; the apical slope, except the latter area, the yellow extending on to the pleuræ, a mark behind the spiracles, the lower third of the mesopleuræ, the apex of the first abdominal segment and broad marks, closely continuous, on the apices of the other segments, yellow. Four front legs rufo-yellow, their coxæ and trochanters yellow; the hind legs rufous, the coxæ black, broadly yellow at the base above, the base of the tibiæ broadly yellow. Wings hyaline, the stigma and nervures black, ♂.

Length 13 mm.

Pundalu-oya.

Face and clypeus punctured, but not strongly or closely. Front with some minute punctures. Mesonotum sparsely, irregularly punctured. Base and areola of metanotum smooth; the rest closely and strongly punctured, thickly covered with long fuscous hair. Pleuræ closely and strongly punctured, the meta irregularly striated. Basal segment with the post-petiole closely finely striated in the middle; the second to fourth more strongly on the basal half.

The gastrocœli are large, deep, smooth. Transverse median nervure interstitial. The areola is not separated behind, where there is no oblique depression; it is clearly separated from the lateral area, is slightly narrowed in the middle, more than twice longer than wide, and transverse at the apex; the apex of the segment has a gradually rounded slope, without teeth. The ventral fold is on segments two to four.

Stictichneumon, gen. nov.

Clypeus separated from the face by a deep, wide furrow which unites with the lateral foveæ; its apex not quite transverse. Areola horseshoe-shaped, longer than wide, clearly separated behind; the petiolar area confluent with lateral. Scutellum roundly convex; roundly sloped at the base and apex; its basal half keeled. Petiole

strongly, closely punctured, as are also the following three segments: gastrocoeli deep, widely separated. Arcolet 5-angled; transverse median nervure interstitial; disco-cubital nervure slightly broken. There is a distinct malar space. The upper tooth of the mandible is distinctly longer than the lower. Antennæ shorter than the body. Temples obliquely, roundly narrowed. Post-petiole not clearly separated, becoming gradually wider towards the apex; it is strongly punctured. There is a distinct depression at the base of the metanotum. Legs short and stout.

The body is black, spotted with yellow; it is more closely and strongly punctured than usual. Temples obliquely narrowed.

This genus should be readily known by the roundly convex scutellum, keeled to the middle, and by the clypeus being separated from the face by a deep transverse furrow. The middle area of the petiole is raised, separated from the sides. The apex of the clypeus is not quite transverse, the middle being slightly dilated.

7.—*Stictichneumon macariæ*, sp. nov.

Black, the face, except for a large mark on its lower half, its sides produced above, the sides of clypeus, inner eye orbits, lower two-thirds of outer, base of mandibles, palpi, a line round the base of the prothorax, one on the pronotum, tegulæ, two lines on the mesonotum, scutellar keels, two small spots on the base of scutellum, a line on its apex, post-scutellum, two oblique spots on the apical slope of metanotum, tubercles, a mark on the lower part of the mesopleuræ, contracted in the middle, the apical part shorter and more oval than the basal, which is narrowed at the apex, an irregular spot on the apex of the metapleuræ, transverse marks on the sides of the basal four abdominal segments, the centre of the penultimate and the whole of the last, yellow. Legs black, the four front coxæ and trochanters yellow; their femora and tibiæ obscure testaceous in front. Wings clear hyaline, the stigma and nervures black, ♂.

Length 10 mm.

Maskeliya, July.

Bred from pupa of *Macaria*, sp.

CRYPTINÆ.

8.—*Buodias rufipes*, sp. nov.

Plate A, fig. 13.

Black, the legs red; a broad band on the antennæ, the upper eye inner orbits, an interrupted line on the base of the pronotum, scutellar keels, scutellum, metanotal spines and the apices of the basal

three abdominal segments and of the sixth more broadly, whitish yellow. Wings hyaline, the nervures and stigma black, ♀.

Length 14 mm.; terebra 4 mm.

Kandy, July.

Face and, to a less extent, the base of clypeus irregularly rugose; the apex of clypeus smooth and shining. Sides of front coarsely, obliquely striated. Mesonotum smooth, shortly, densely pilose. Base of metanotum finely irregularly striated; the rest stoutly reticulated—striated; the spines long, stout. Propleuræ stoutly, closely striated; the mesopleuræ irregularly striated at the base, the rest finely striated—reticulated, but not closely; the metapleuræ obliquely striated.

9.—*Melcha cinctipes*, sp. nov.

Black, face, clypeus, mandibles except at the apex, palpi, the upper inner orbits, malar space, the upper and lower sides of prothorax broadly, metapleuræ and apical half of metanotum, the apices of the basal three segments of the abdomen and the apical pale yellow; the scutellum and the keels lemon-yellow. Four front legs pale yellow; the hind coxæ pale yellow, black above, the trochanters black; the femora red, the extreme apex black; the tibiæ black, with a white band near the base, tarsi white, the basal joint to near the apex, and the apical joint, black. Wings hyaline, the stigma and nervures black, ♂.

Length 7.5 mm.

Peradeniya, August.

Base of metanotum smooth, irregularly punctured to the keel; the rest closely reticulated. Propleuræ with some stout striæ in the middle behind. Mesopleuræ obscurely punctured, with a striated band in the centre above. Lower part of metapleuræ irregularly punctured—reticulated. The second and following segments of the abdomen are closely punctured. Tarsi spinose.

Antennal scape fulvous; flagellum densely covered with short, thick, black pubescence. There is a yellow line on the centre of the outer orbits.

10.—*Melcha annulipes*, sp. nov.

Black, an ovoid mark on the centre of the face, the broad end above and rounded, clypeus, palpi, mandibles except the teeth, the upper inner orbits from the antennæ, pronotum broadly, tegulæ, tubercles, scutellum, metanotum from shortly behind the basal keel, the top forming two rounded lobes, the yellow extending on to the metapleuræ below the bottom of the lobes and being dilated at the base below, the apex of the first and second abdominal segments

broadly and the apical four segments entirely, yellow ; the petiole rufous. Legs rufous, the four front coxæ and trochanters white ; the hind tibiæ fuscous, with a broad ring near the base, the hind tarsi, except the apical joint, white. Wings hyaline, the stigma fuscous, the nervures darker, ♀.

Length 6-7 mm. ; terebra 2 mm.

Peradeniya, September.

Antennæ broadly ringed with white ; the scape and base of flagellum rufo-testaceous. The part below the ocelli closely, irregularly, longitudinally striated, keeled in the middle ; the depressed front with two stout smooth keels. Face finely, irregularly rugose. Mesonotum finely, closely, rugosely punctured. Scutellum smooth. Base of metanotum irregularly rugose ; the apex distinctly transversely striated, the striæ clearly separated. The centre of propleuræ stoutly striated, the mesopleuræ closely, irregularly, obliquely striated and aciculated ; the metapleuræ closely, strongly, obliquely striated. The second and third segments of the abdomen closely, uniformly punctured.

11.—*Melcha varibalteata*, sp. nov.

Black, the median segment, apex of mesopleuræ below, and petiole rufous ; face, clypeus, mandibles, palpi, lower third of outer orbits, base of propleuræ, pronotum, mesosternum, tegulæ, tubercles, the usual plate under the hind wings, the apices of the five abdominal segments and marks in the centre of the apical two, yellow, the yellow on the abdominal segments backed with testaceous behind. Four front legs pale fulvous, the coxæ and trochanters white ; the hind coxæ fulvous, their trochanters black ; femora rufous, tibiæ and tarsi fuscous, the tibiæ broadly rufous at the base. Wings hyaline, the apex slightly smoky, the stigma fuscous, the nervures darker, ♂.

Length 5 mm.

Kandy, July.

Head smooth and shining. Thorax smooth, except the apical slope and sides of metanotum behind the keel, which are irregularly rugose. Middle lobe of mesonotum depressed in the centre, and having a distinct fovea, longer than wide ; the apex at the end of the parapsidal furrows with a row of foveæ. The petiole is black at the apex, the centre yellowish, as compared with the sides.

12.—*Melcha reticulata*, sp. nov.

Black, the face, clypeus, mandibles, palpi, the lower fourth of the outer orbits, malar space, the inner orbits to near the antennæ, a broad line on the apical two-thirds of the pronotum, tegulæ.

tubercles, antennal keels, scutellum, the usual mark behind the wings, the apical slope of the metanotum except for a black mark in the centre, the apices of the basal four abdominal segments and the apical entirely, yellow. The four front legs yellow, tinged with fulvous, the hinder rufo-testaceous, the apex of the coxæ, trochanters, apical half of tibiæ, and the tarsi blackish. Under side of antennal scape testaceous. Wings hyaline, the nervures and stigma black, ♂.

Length 7 mm.

Matale, July.—Reared from *Psyche subteralbata*.

Head shining, impunctate. Mesonotum minutely punctured. Parapsidal furrows closely, transversely striated; the part where they end irregularly punctate—reticulated. The base of metanotum smooth, the rest strongly, closely reticulated. Propleuræ and mesopleuræ smooth; the metapleuræ irregularly reticulated. The second and third segments of the abdomen are closely punctured; the others smooth, densely pilose.

13.—*Melcha erythropus*, sp. nov.

Plate B, fig. 2.

Black, the upper inner orbits broadly, more broadly below than above, a line on the lower part of the inner, the greater part of the clypeus, labrum, mandibles except the teeth, palpi, a line on the apical three-fourths of the pronotum, tegulæ, tubercles, scutellum, a large crescent-shaped mark behind the wings, the apices of the basal three abdominal segments and a narrower line on the apex of the sixth, yellowish-white. Legs rufous, the anterior coxæ and trochanters white; the greater part of the hind tarsi blackish. Wings clear hyaline, the nervures and stigma black. Median segment, apex of mesosternum and base of metapleuræ. rufous, ♀.

Length 7 mm.; terebra 2 mm.

Peradeniya, August.

The sixth to twelfth joints of the antennæ are ringed with white except above. Face closely, irregularly, rugosely striated. Clypeus obscurely punctured. Front with a distinct keel down the centre. striated on either side. the striæ stronger and more irregular above.

Pronotum and mesonotum smooth and shining; the propleuræ in the middle stoutly striated; the mesopleuræ except behind, closely, finely reticulated. Metanotum behind the keel smooth and shining; the rest closely, rugosely reticulated. Metapleuræ closely, obliquely striated, more strongly above than below the furrow. The second and third segments of the abdomen are finely, closely punctured; the others smooth and shining. Tarsi closely spinose. Areolet square, the apical nervure faint. Base of mesosternum yellow, the

rest black : the second transverse cubital nervure faint. The base of the first abdominal segment is rufous.

A specimen from Kandy is 12 mm. long, has a stripe on the sides of the fourth abdominal segment, and the penultimate is entirely white.

14.—*Melcha maculiceps*, sp. nov.

Black ; the upper inner orbits, a somewhat pyriform mark on the centre of the face, the thickened end at the top and rounded, the clypeus except on the sides and apex, mandibles broadly at the base, tegulæ, tubercles, scutellum, the apical slope of the metanotum, the top of the yellow part narrowed, transverse above, with the sides slightly oblique, and the apices of the abdominal segments, yellow. Legs rufous, the fore coxæ and trochanters yellow, the apical joint of the tarsi black. Wings hyaline, the nervures and stigma black, ♀.

Length 8 mm. : terebra 2 mm.

Peradeniya, October. Bred from cocoons of *Chrysomelid* beetle feeding on orchid.

The sixth to tenth joints of antennæ white below. Face closely and distinctly punctured. The upper part of the front closely, longitudinally, irregularly striated—reticulated. Mesonotum minutely, closely punctured ; the apex of the middle lobe closely, strongly, longitudinally striated, the striated part broad and transverse at the apex ; separated from the scutellar depression by a smooth raised part. The scutellar depression is deep and bears stout keels. Base of metanotum irregularly, closely, rugosely punctured ; the area with a stout irregular keel in the centre ; the rest is closely reticulated. Pleuræ closely punctured, the propleuræ on the lower half stoutly striated ; the sternum bordering the furrow is on the basal half, closely, finely, transversely striated. Sides of post-petiole closely, longitudinally striated.

15.—*Frona rufipes*, sp. nov.

Plate B, fig. 1.

Black, the face, except for a triangular large black mark in the centre, clypeus, except for a black line, dilated in the middle, at the apex, labrum, base of mandibles, palpi, the upper orbits to the end of the top, the lower half of the outer more broadly, malar space, a line on the pronotum, tegulæ, scutellum, a reversed T-shaped line on the apical, striated part of the metanotum, the cross pieces being on the apical slope, a semi-circular mark on the lower, apical part of the mesopleuræ, a smaller mark, longish, rounded above, transverse below, under and in front of it ; a large mark, rounded in front, gradually widened towards the outer side behind the wings, an

elongated mark, narrowest behind, on the metapleuræ and the apices of the abdominal segments, pale yellow. Legs rufous; the four front coxæ and trochanters yellow; the hind tarsi white, fuscous at the base, the apical joints black. Wings hyaline, the nervures and stigma black, ♀.

Kandy, July

Length 13 mm.; terebra 4 mm. —

Antennæ black, broadly ringed with white. Front with a distinct central keel; on the top and bottom it has, on either side, three or four irregular, curved keels. Face punctured, the centre irregularly, weakly striated. Thorax smooth and shining. The metanotum behind the keel and the pleuræ closely, distinctly striated as usual. Median segment and hind coxæ and trochanters covered with long black hair. Areolet one half longer than the width at the base.

The hind coxæ are marked above at the base with yellow: in the ♂ they are black, except at the base above, the middle coxæ have a large black mark on the outer side at the apex above. The apex of the metanotum at the white transverse line is roundly dilated.

16. — *Friona bituberculata*, sp. nov.

Length 13 mm. ♂.

Kandy, July.

In colouration this species resembles closely *F. rufipes*, but the pleuræ are not marked with yellow, the hind coxæ are red, without black or yellow, and the face wants the black central mark. Otherwise the two may be separated thus:

Apex of metanotum not raised, near the apex armed with two stout teeth or tubercles, which are enclosed by the yellow apical band; the apical transverse band as long as the basal central line, this being narrowed towards the base; pleuræ, immaculate, not strongly or closely striated; the base of the first and the whole of the apical two segments, white, *bituberculata*, Cam.

Apex of metanotum raised transversely, not tuberculated; the apical transverse line narrow, the longitudinal one widest at the top, pleuræ marked with yellow, distinctly striated face; the base of the first abdominal segment not yellow; the apical two segments only yellow at the apices, *rufipes*, Cam.

There is a triangular mark on the centre of the metanotum, the narrow end at the apex; the striæ on it are irregular and run into reticulations. The striation on the front is not very strong. Face yellow. Clypeus black, with a yellow mark, transverse, rounded at the sides in the centre. Legs red; the hind trochanters black. Areolet not very large, almost square (smaller than in *rufipes*, which receives the recurrent nervure shortly behind the middle).

17.—*Fenenias erythropus*, sp. nov.

Plate A. fig. 14.

Black, very shining, the centre of the face and clypeus, the latter more widely than the former : the inner orbits narrowly from near the bottom and round the top, the lower two-thirds of the outer, base of mandibles and palpi, a narrow line on the apical half of the pronotum, the base below, a transverse small mark on the apex of the middlelobe of the mesonotum, scutellar keels, apex of scutellum, the mark longer than broad ; a line on the centre of the apical slope of the metanotum, followed downwards, on either side, by a similar line of the same length and united to a mark on the middle, which is longer than broad and of equal width ; tubercles, a pyriform mark on the lower part of the mesopleuræ near the base, a smaller, somewhat similar mark on the lower side at the apex, a stripe along the lower side of the furrow, the usual mark under the hind wings, an oblique mark near the apex of the metapleuræ and narrow lines on the apices of the abdominal segments (the apical interrupted), pale yellow. Legs red ; the anterior at the base and the hind tarsi yellowish. Wings hyaline, the nervures and stigma black, ♀.

Length 8 mm.; terebra 4 mm.

Peradeniya, September.

Face and upper part of clypeus distinctly punctured, the former more closely and rugosely above. Vertex punctured in the centre ; the front clearly separated from it and with a steep slope. Mesonotum distinctly, but not very closely or coarsely, punctured ; the furrows deep, wider and striated towards the apex ; they do not extend near to the scutellum, which is finely, very sparsely punctured, its lateral slope is stoutly, obliquely striated at the base, the rest with some elongated punctures. Base of metanotum with a smooth, deep, oblique depression ; in the middle is an indistinct U-shaped keel ; the centre is irregularly reticulated ; the sides much more finely and regularly reticulated. The apical slope is depressed in the centre and closely, transversely, irregularly striated—reticulated ; there is no transverse basal keel ; the apical is not very distinctly defined, especially in the centre : the teeth are broad and blunt. Propleuræ strongly striated except for a punctured space above and the base below, which is smooth. Mesopleuræ closely punctured, coarsely, irregularly, longitudinally striated at the base above, irregularly, closely reticulated in the middle ; the apex with a large smooth and shining space. First abdominal segment smooth, shining, the apex with some minute scattered punctures ; the second segment closely and distinctly punctured, except at the apex ; the basal half of the third is more closely and finely punctured.

The areolet is minute, closed at the apex ; the transverse median nervure is received behind the transverse basal ; the transverse median nervure in hind wings broken below the middle. Antennæ long, ringed with white, slender. Metapleural keel reaching close to the hind coxæ. Temples very short, obliquely narrowed. Head not much wider than the thorax. The basal transverse keel on the metanotum is only indicated in the middle.

This species may be separated from the type of the genus thus :—

Metanotal teeth stout ; metanotum with three yellow marks in a triangle ; the mark on the mesonotum oval, longer than broad, hind tarsi fuscous, *albomaculatus*, Cam.

Metanotal teeth small ; metanotum with the upper part of the apical slope margined with yellow ; the mark on the mesonotum transverse, small, broader than long, *erythropus*, Cam.

In *albomaculatus* the clypeus is more convex and not so transverse at the apex. In *Fenenias* the front is more deeply and widely depressed, the depression reaching closer to the ocelli, than in *Skeatia*.

18.—*Skeatia acutilineata*, sp. nov.

Plate A, fig. 12.

Black, face, clypeus, base of mandibles, palpi, the inner eye orbits to the end of their top, the outer from near the top, the yellow line becoming gradually wider, malar space, the base of the prothorax narrowly, the middle of pronotum broadly, tegulæ, a mark, longer than broad and of equal width in the centre of the mesonotum, scutellar keels, scutellum, a triangular mark—the narrow end above—its base shorter than the sides and laterally united by a short line to a large mark on the sides of the apical slope, enclosing the spines and going on to the pleuræ, the apices of all the abdominal segments, tubercles, a large oblique mark on the centre of the mesopleuræ, roundly contracted above and below and narrowed at the apex, mesosternum, and a mark on the metapleuræ below the keel, widest and oblique at the apex, yellow. Antennæ broadly ringed with white in the middle. Legs rufous, the coxæ and trochanters yellow, the hind coxæ broadly black at the apex above, this part joined to the base on the lower side by a broad curved line ; the apex of the hind femora narrowly, the base of the tibiæ still more narrowly, their apex more broadly and the apical joints of their tarsi, black : the hind tibiæ are infuscated. Wings hyaline, the nervures and stigma black ; areolet minute, longer than wide, ♀.

Length 12 mm.: terebra 3–4 mm.

Kandy, July.

Front irregularly rugosely punctured except below the ocelli ; the centre keeled. Face distinctly, but not very closely, punctured ; the clypeus more sparsely punctured above, smooth below. Thorax

closely and strongly punctured ; the metapleuræ more strongly than the rest, the metanotum closely reticulated, most strongly and more irregularly on the apex. The first abdominal segments sparsely, the others closely and uniformly punctured.

Characteristic of this species is the acutely narrowed top of the mark on the metanotum; in the other species it is rounded.

19.—*Skeatia cyclosia*, sp. nov.

Black, the face, clypeus, mandibles at base, palpi, the upper eye orbits to the end of the top, the outer from shortly above the middle, malar space, a broad line on the pronotum, a line on the lower edge of the propleuræ, a small mark, longer than broad, transverse at the base, rounded at the apex on the centre of the mesonotum, scutellar keels, scutellum, the sides of the metanotum at the apex broadly, united above by a rounded line, which has the rounded top broader than the sides ; tubercles, a large mark on the mesopleuræ, sharply contracted in the middle, the basal portion being the larger, mesosternum and a large mark in the centre of the metapleuræ, and the apices of the abdominal segments, yellow. Legs fulvous ; the coxæ and trochanters yellow ; the base and a mark on the outer side of the hind coxæ, under side of trochanters, apex of hind femora, the base of their tibiæ more narrowly and their apex more broadly, black ; the hind tarsi white. Antennæ broadly ringed with white. Wings clear hyaline, the stigma and nervures black, ♀.

Length 12 mm.; terebra 2–3 mm.

Kandy. Bred from cocoon of *Cyclosia panthona*, a zygaenid moth.

Front with a distinct keel ; the part next to the keel finely rugose, outside obscurely striated. Face and top of clypeus punctured, strongly, but not closely. Mesonotum closely, finely, rugosely punctured. Scutellum smooth ; a small triangular black mark at the base. Metanotum closely, rugosely reticulated ; the basal area smooth, wider than long. Propleuræ stoutly striated, obliquely above, below more strongly longitudinally; the mesopleuræ and metapleuræ closely punctured. Base and centre of first abdominal segment aciculated, the sides of post-petiole closely punctured and striated ; the other segments closely punctured.

The Malay *S. varipes* closely resembles this species. They may be separated as follows :—

The metanotal area small, greatly narrowed at the apex, the top of the yellow line not dilated, the large line on mesopleuræ not contracted in the middle, at apex united to the yellow on the mesosternum, *varipes*, Cam.

The metanotal area large, not greatly narrowed at apex, the top of yellow line greatly dilated ; the large line on mesopleuræ contracted in the middle, not united to the yellow on the sternum, *cyclosia*.

20.—*Skeattia panthonæ*, sp. nov.

Black ; face, clypeus, mandibles at the base, palpi, inner orbits, their top, the lower two-thirds of the outer more broadly, malar space, the edge of the pronotum, the lower edge of the propleuræ more broadly, an irregular small mark on the middle of the mesonotum, scutellum, post-scutellum, scutellar keels, the sides of the apical slope of the metanotum, united above by a narrow line to a spot which is longer than broad, rounded above, transverse below, tubercles, a moderately sized roundish mark on the lower part of the mesopleuræ at the base, a smaller—half the size—somewhat conical one on the lower side of the apex, a large mark behind the wings, partly on the top, partly on the pleuræ, a quadrangular mark twice longer than broad on the centre of the metapleuræ, the mesopleuræ and the apices of the abdominal segments, pale yellow. Legs : the four anterior yellow, tinged with fulvous, the hinder fulvous. the coxæ yellowish, black at the base and with a black large mark on the apex above, the lower half the larger, and projecting beyond it at the apex ; the trochanters, apex of femora, the base of tibiæ more narrowly, their apex more broadly, black ; the tarsi yellowish. Wings hyaline, the stigma and nervures black, ♂.

Length 11 mm.

Kandy. Bred from *Cyclosia panthona*.

Face and upper half of clypeus strongly punctured. Front stoutly irregularly striated. Mesonotum strongly, closely, the scutellum sparsely punctured. Metanotum behind the keel closely rugosely punctured, the rest closely strongly reticulated, the reticulations converging into striæ at the apex. Propleuræ, except at the base, strongly, closely striated. Mesopleuræ closely striated (more closely and less strongly than the propleuræ) obliquely above at the base, running from the tubercles to the base of the pleuræ ; the striæ on the lower half are not so oblique and run from the base to the apex. Base of the metapleuræ with some irregular widely separated keels, the rest closely, strongly, obliquely striated. Petiole obscurely aciculated ; post-petiole smooth and shining ; the second segment thickly covered with round, clearly separated punctures ; the third similarly but much less strongly punctured. The area on the base of the metanotum is wide at the base, not separated from the basal furrow ; it becomes obliquely narrowed towards the apex.

Although this species has the same host as *S. cyclosiæ* it is not, I believe, its male. The two may be separated thus :

Post-petiole strongly aciculated and punctured ; the mark on the centre of metanotum broader than long ; one long mark on the mesopleuræ, *cyclosiæ*.

Post-petiole smooth, shining, impunctate, the mark on the centre of the metanotum longer than broad; two widely separated marks on the mesopleuræ, *panthoneæ*.

21.—*Bathythrix* ? *rubriornatus*, sp. nov.

Plate B, fig. 4.

Black, the upper part of the propleuræ and mesopleuræ, the mesonotum, and the scutellum dark red; the lower part of the propleuræ yellowish; the apex of the first abdominal segment at the sides broadly testaceous; the apex of the third and fourth yellow, the latter only narrowly. Four front legs dark fuscous, the hinder blackish, the coxæ behind, trochanters, and the base of tibiæ white. Wings hyaline, a broad cloud, rounded and narrowed in front behind the transverse median and the transverse basal, and a much broader one extending from near the base of the stigma to the end of the radial cellule, the centre of the apex of the wings, being hyaline; the apex of the hind wings smoky. Antennæ fuscous, darker at the apex, ♀.

Length 6 mm.; terebra 1 mm.

Peradeniya, April.

In Ashmead's tables this species would run into the genus *Bathythrix*, but not having a specimen of that genus for comparison I cannot say if it be really identical with it or not. In my species the parapsidal furrows are deep, striated, and broadly rounded behind, not reaching to the scutellar depression. The areolar is 6-angled, narrowed behind and much longer than wide; there is a distinct petiolar area; the base of the segment is deeply depressed. The head (including the clypeus) and thorax are thickly covered with white long pubescence. Mesonotum aciculated. Scutellum laterally keeled to near the middle. Median segment closely, finely punctured. Petiole closely, distinctly, longitudinally striated; the second and third segments are closely punctured. First joint of flagellum as long as the second.

22.—*Bathythrix* ? *striatus*, sp. nov.

Plate B, fig. 5.

Black, the antennal scape, the base of prothorax, tegulæ, tubercles, the base of the basal four segments of the abdomen broadly and of the last narrowly, yellow. Legs rufo-testaceous, the apical four coxæ and trochanters and the base of the hind tibiæ yellow. Wings hyaline, a black cloud behind the transverse median nervure and a large one beginning at the base of the radial cellule, extending to near its apex and more dilated on the outer side below than on the upper; there is a fuscous cloud near the apex of the hind wings, ♀.

Length 7 mm.; terebra 1 mm.

Kandy,

Head closely rugose; the vertex closely striated in the centre, closely covered with white pubescence; the centre of the face roundly tuberculate. Mesonotum very finely and closely transversely striated; the furrows crenulated. Metanotum closely rugosely reticulated, the basal central area is wide at the base, becomes gradually narrowed to the apex, where the keels almost unite; the areola is open at the apex, being continuous with the posterior median area; the lateral basal areas are large and of equal width. Except at the apex the basal three abdominal and the basal half of the fourth segments are closely, regularly, finely, longitudinally striated.

This is a larger and stouter species than *B. rubriornatus*; the abdominal segments are closely longitudinally striated, the metanotum less regularly areolated, there being no regularly defined areola, and the face is more distinctly tuberculated in the centre.

Clitiga, gen. nov.

♂. Antennæ as long as the body, 26-jointed, the first joint of the flagellum longer than the second. Parapsidal furrows indicated at base only. Scutellum laterally stoutly keeled to near the apex. Median segment short, smooth, and shining, the apex with a straight, steep slope; completely areolated, the areola wider than long, rounded behind, transverse at the apex; there are five areas on the apex; spiracles small, oval; the sides at the apex toothed. Mesopleuræ largely, deeply excavated in the centre. Areolet 5-angled, the apical nervure faint, but distinct; disco-cubital nervure rounded, not angled or broken; the transverse median nervure received beyond the transverse basal; transverse median nervure in hind wings broken below the middle. First abdominal segment greatly dilated at the apex, the base stoutly, angularly projecting; the base of second segment depressed, the apex of the depression transverse, clearly separated. Legs moderately stout. Face flat, not separated from the clypeus, which is transverse at the apex. Mandibles with a long apical and a short sub-apical tooth.

♀ Antennæ stout, dilated towards the apex, longer than the body, the basal joints of flagellum elongated. The post-petiole is not so markedly tuberculated on the sides; the apex of the abdomen is bluntly pointed; the ovipositor projects and has stout sheaths. The areola is not wider than long, as it is in the ♂ I have described, it being nearly as long as wide; the base of the second abdominal segment is not tuberculate laterally, but it is depressed at the base, as in the ♂. The abdomen is short, bluntly pointed at the apex.

The difference between the *Hemitelini* and the *Phygadeuonini* appears to be somewhat shadowy, and practically consists in the absence in the former of the second transverse cubital nervure and in its presence in the latter. It is clear enough in the present genus, although bullated in the middle. In Ashmead's arrangement of the *Phygadeuonini* it would come in near *Leptodermas*, having five areæ on the apex of the metanotum, but it has no keels on the first abdominal segment. The deeply excavated mesopleura is noteworthy. The pleural furrow is wide, deep, curved.

23.—*Clitiga excavata*, sp. nov.

Plate B, fig. 6.

Black, shining; the face, except for a line in the centre above, clypeus, and mandibles except at the apex, palpi, the base of the prothorax, tegulæ, tubercles, the lower part of the mesopleural depression, the mark roundly narrowed above and the apex of the scutellum, pale yellow. Wings hyaline, the nervures and stigma black. Front legs fuscous—testaceous; the coxæ and trochanters white; the middle fuscous, the coxæ at the apex and above white; the hind legs with the coxæ black, the rest fuscous, tinged with black, ♂.

Length 5 mm.

Haputale, ex pupæ of *Michræseus oblatarius*.

January.

Mesonotum clearly, but not closely punctured. The central excavated part of the mesopleuræ is smooth, its edges punctured; the lower part and the sternum rather strongly punctured. The upper part of the metapleuræ strongly, but not closely punctured; the lower part smooth and bounded by stout, curved keels. The posterior median area of the metanotum is surrounded on the inner side by a row of foveæ; the outer area is stoutly closely striated, the inner with two or three irregular keels, the central quite smooth; the outer is whitish above and there is a white spot on the apex of the spiracular.

24.—*Clitiga forticornis*, sp. nov.

Plate B, fig. 7.

Black, the face, except for a black line broad and narrowed below, a line on the centre of the clypeus broadly dilated at the apex, the orbits (broadly above) except on the centre of the malar space, basal half of mandibles, palpi, a broad line on the apical half of the pronotum, the lower part of propleuræ, tegulæ, tubercles, scutellums, the sides of the median segment from shortly above the spines, about

the lower third of the mesopleuræ, the mark rounded at the base and apex, a large oblique mark on the apical half of the metapleuræ, united to the lateral mark on the metanotum, the apices of the basal two abdominal segments broadly, a large mark on the sides of the third segment, its apical half dilated inwardly. a line, narrowed at the apex on the sides of the fourth and the apical segments, pale yellow. Legs rufo-fulvous, the four front coxæ and trochanters yellow, the hind coxæ black, tinged with brown at the apex, yellow for the greater part above, trochanters black below, yellow above, their tibiæ and tarsi infuscated at the apex. Wings hyaline, the nervures and stigma black. Antennæ longer than the body, the middle broadly clear white, ♀.

Length 5-6 mm.

Ex pupæ of *Michræseus oblatus*.

Haputale, January.

Face punctured, but not closely or strongly; the clypeus smooth, with some scattered punctures above. Front and vertex smooth. Mesonotum, lower half of mesopleuræ and mesosternum closely punctured. Base and centre of metanotum smooth, the edges of the areola and the posterior median areæ with a narrow striated border, the other areæ aciculated. Metapleuræ more strongly punctured than the mesopleuræ. Post-petiole closely rugose and finely striated; the second and third segments closely punctured. Gastrocœli moderately deep, smooth, yellowish testaceous.

Earrana, gen. nov.

Median segment smooth, with one transverse keel behind the middle; long, gradually rounded towards the apex; the spiracles large, about three times longer than wide. Abdominal petiole long, slender, not much dilated at the apex, the spiracles placed immediately behind the middle; the segments smooth; the ovipositor projecting. Areolet punctiform as in *Mesostenus*, open in front; transverse median nervure received behind the transverse basal; the transverse median nervure in hind wings broken in the middle. Parapsidal furrows deep. Thorax more than three times longer than wide. Legs long and slender; the hind coxæ three times longer than wide; the fore tarsi twice the length of tibiæ; claws moderately long, slender. Head slightly wider than the thorax. Metapleural keels stout, reaching to the hind coxæ. Eyes large, reaching to the base of the clypeus, there being a clear malar space. Mandibles edentate, gradually narrowed towards the apex.

The type of this genus is a peculiar insect. It has the deep parapsidal furrows and the furrow on the lower part of the mesopleuræ of

the *Cryptinæ*, and its minute areolet would place it in the *Mesostenini*, but its uniform rufo-testaceous colour is very different from anything found in that group. It might in fact be readily mistaken for a *Paniscus* or an *Ophionid*. It differs from the *Cryptinæ* in the spiracles on the first abdominal segment being placed quite close to, almost at the middle—further back than in *Ophion*, but not so far back as in *Paniscus*. In the position in which the spiracles are placed it agrees with the Malay genus *Cæsula*. From the resemblance of the species to *Paniscus* and *Ophion* I have no doubt that observation will show that it is, like the genera mentioned, nocturnal in habits. The ocelli, too, are large as in these genera.

25.—*Earrana lutea*, sp. nov.

Plate B, fig. 3.

Luteous, smooth, and shining, the face, inner orbits to the ocelli and mandibles, except at the apex, lemon-yellow; the four front legs at the base yellowish, the hind tibiæ and tarsi fuscous; wings clear hyaline, the nervures black; antennæ longer than the body, black, the scape luteous; it is short, thick, not much longer than broad. Pleural sutures crenulated; on the median segment, between the hind coxæ, are three stout transverse keels, bordered on the outer side by a keel which runs down to the base of the hind coxæ. Mesopleural furrow deep, obscurely crenulated, ♀.

Length 10 mm.; terebra 2 mm.

Kandy, October.

OPHIONIDÆ.

26.—*Ophion bicarinatus*, sp. nov.

Dark rufous, the eye orbits broadly, face, scutellum, and pleuræ pallid yellow; antennæ pale rufous, wings hyaline, the costa and stigma rufous, the nervures darker; the recurrent nervure received twice the length of the transverse cubital nervure behind the base of the apical abscissa of the radius; the stump of a nervure as long as the transverse cubital. On the apical slope of the metanotum, commencing at the transverse keel, are two stout longitudinal keels; the sides of the apical slope are bordered by a stout, waved keel, which extends to the base of the hind coxæ. Face minutely punctured; clypeal foveæ large, deep. Thorax impunctate, mesonotum covered with a fuscous pubescence; the parapsidal furrows distinct on basal half, ♀.

Length 21 mm.

Maskeliya, November,

The depression at the base of the metanotum is deep, roundly narrowed towards the apex; its width at the base longer than the total length. This species is much larger than any of the recorded British Indian species. It has keels on the metanotum as in *O. areolatus*, Cam., but, apart from the smaller size of the latter (15 mm.), *areolatus* has the basal depression on the metanotum semicircular, not dilated distinctly at the apex as in the Ceylonese species. *O. fuscomaculatus*, Cam., is also smaller and may readily be known by the recurrent nervure being received opposite the end of the basal abscissa of the radius. In one specimen there are indications of three fuscous lines on the mesonotum.

27.—*Pleuroneurophion erythrocerus*, sp. nov.

Head pale lemon-yellow, the thorax pale testaceous, the mesonotum more rufous in tint; the abdomen, except at the base, rufo-testaceous, darker towards the apex; legs testaceous, the anterior paler. Wings hyaline, the stigma testaceous, the nervures blackish; the basal abscissa of the disco-cubital nervure slightly roundly curved downwards at the apex; there is hardly an indication of a stump of a nervure on the disco-cubital nervure; its apical abscissa is slightly but distinctly longer than the basal abscissa of the cubitus, which is slightly shorter than the recurrent nervure; the disco-cubital is thickened in the middle, with a long bulla beyond. Prothorax and mesothorax closely punctured, the propleuræ obscurely striated. Basal depression of metanotum with two stout and some indistinct keels; the base smooth, the rest with broadly rounded striæ. Metapleural keel broad, rounded at base and apex, the middle slightly turned upwards, ♀.

Except that there can hardly be said to be a stump of a nervure on the disco-cubital nervure this species fits into *Pleuroneurophion*. It has the thickened base of the radius of that genus and of *Eniscospilus*, but it wants the horny points found always in the latter genus.

The transverse median nervure is placed behind the transverse basal; the median nervure in hind wings is broken far below the middle. The ocelli are not in a black patch. The antennæ are much more reddish in tint than the body.

Length 14–15 mm.

Peradeniya.

28.—*Eniscospilus spilonotus*, sp. nov.

Rufo-testaceous, the head, except the ocellar region which is black, yellow; the mesonotum with three large black lines, the fifth and following segments of the abdomen black. Antennæ black, fuscous towards the apex. Wings hyaline, the stigma and nervures

black ; there is one dark horny point, broadly transverse below, roundly narrowed in front, the base rounded, the apex slightly rounded inwardly. Transverse cubital nervure two-thirds of the length of the recurrent, which is more than twice its length from it. Scutellum yellow, its apical half irregularly striated. Base of metanotum smooth; the base of the apical part smooth, except for a few irregular striæ ; the centre with roundly curved irregular striæ : the apex smooth. Propleuræ almost smooth, the centre of the mesopleuræ finely, closely striated except above ; metapleuræ below the keel finely, irregularly striated ; the spiracular area coarsely, irregularly, obliquely striated, much more strongly towards the apex than at the base. Metasternal keel stout, curved at base and apex, the base dilated.

Brulle (Hymen. IV., 145) describes an *O. plicatus* from Java which has three black marks on the mesonotum ; but it is an *Ophion*, not an *Eniscospilus*, it having no horny points in the wings.

29.—*Eniscospilus melanocarpus*, sp. nov.

Rufous ; the fifth and following segments of the abdomen black ; the antennæ black, broadly rufous at the base : wings hyaline, the stigma and nervures black ; the horny point triangular, the sides rounded, large, and with a long curved tail ; there is a small point beyond the middle of the latter, about twice longer than wide, rounded behind, transverse at the apex. Transverse cubital nervure one-third of the length of the apical branch of the disco-cubital and about one-fourth shorter than the recurrent. Scutellar keels stouter than usual. Basal depression of metanotum stoutly closely striated, more closely in the centre than on the sides ; the base smooth ; the rest closely reticulated, less closely at the base, where there are some irregular longitudinal keels. Pleuræ closely, but not strongly punctured ; the metapleuræ more strongly than the rest ; the propleuræ striated closely in the centre.

Length 12 mm.

Kandy, August.

30.—*Eniscospilus xanthocephalus*, sp. nov.

Testaceous, the head and scutellum pallid lemon-yellow ; the ocellar region and the fifth and following abdominal segments black ; the occiput and a line in the centre of the face rufous. Antennæ rufo-testaceous ; the basal two-thirds of the first abdominal segment yellow. Wings clear hyaline, the stigma clear testaceous, the costa and nervures black ; transverse cubital nervure straight, oblique, slightly more than one-half the length of the recurrent

nervure, which is about one-fourth shorter than the apical abscissa of the disco-cubital nervure ; third discoidal cellule short and wide, in length not much more than twice its width at the apex. Transverse basal nervure interstitial. The horny spot is broadly rounded above, slightly, gradually narrowed to the apex which is transverse ; the apical spot is much smaller, about three times longer than wide, oblique at the base, narrowed at the apex, ♀.

Length 11–12 mm.

Peradeniya, June.

Smooth and shining ; the upper half of the mesopleuræ finely punctured, the lower finely, closely, longitudinally striated. Basal slope of metanotum with a keel in the centre and one on the sides ; the basal region smooth, the apical almost smooth in the centre, the sides transversely striated. Apex of clypeus broadly rounded.

This species is readily known from the other species here described by the wide, as compared with its length, third discoidal cellule

31.—*Eniscospilus unilineatus*, sp. nov

Pallid testaceous, the head pale lemon-yellow ; the third and following segments of the abdomen fuscous ; a deep, black, broad line in the centre of the middle lobe of the mesonotum, the mesosternum black ; the apex of the first and the second abdominal segments are more rufous in colour. Legs coloured like the thorax, the femora deeper in tint. Wings hyaline, the nervures and stigma black ; the basal horny point is pyriform and is followed by a less distinct curved line ; beyond it is a small square spot, ♀.

Length 17 mm.

Peradeniya, July

Antennæ rufous, the scape and the basal 10–11 joints of flagellum blackish. Head shining, impunctate ; the apex of clypeus broadly rounded. Mesonotum shining, covered with a pale pubescence. Basal half of scutellum keeled laterally. Base of metanotum smooth, irregularly transversely striated laterally, the centre irregularly stoutly reticulated ; the apical slope with some stout, irregular, roundly curved keels. Propleuræ smooth, indistinctly obliquely striated below. Mesopleuræ closely, finely punctured. Metapleuræ finely rugose, the upper part with some stout, oblique striæ.

32.—*Eniscospilus dasychiræ*, sp. nov

Pallid luteous, the abdomen darker coloured, especially towards the apex ; the head pallid yellow ; antennæ rufous. Wings hyaline, the stigma, costa, and basal abscissa of radius testaceous ; there is one small pyriform horny point ; the transverse cubital nervure

slightly roundly curved, as long as the recurrent nervure. Scutellum keeled laterally to the apex. Base of metanotum smooth; the basal depression with a stout central and two or three keels on either side of it; the base, behind the keel, is irregularly striated; the striae in the centre longitudinal, the others irregularly transversely, the rest of the segment with close, rather strong, regularly roundly curved striae. Propleurae closely, obliquely striated. Mesopleurae closely punctured. Metapleurae closely, coarsely, obliquely striated.

The disco-cubital nervure is roundly curved and thickened in the centre and with a large bulla beyond the thickened part. Legs densely pilose; the pile on the femora longer, paler, softer, and sparser than on the tibiae or tarsi, ♀.

Length 21 mm.

Pundalu-oya, January.

Bred from *Dasychira horsfieldi*.

33.—*Eniscospilus horsfieldi*, sp. nov.

Length 18 mm., ♀.

This species is very similar to the above described, but is smaller, more slenderly built, and paler in colour. The two may be separated thus :—

Length 18 mm.; transverse cubital nervure straight, oblique, not distinctly rounded; distinctly shorter than the recurrent nervure, *horsfieldi*.

Length 21 mm.; transverse cubital nervure with a distinct, rounded curve, as long as the recurrent nervure, *dasychirae*.

Base of metanotum shagreened; the base of the apical part has one or two longitudinal keels; the rest with irregular, curved keels pointing towards the apex; the rest is closely covered with roundly curved backwards, striae, which, at the apex, extend on to the pleurae. Propleurae rather strongly obliquely striated in the middle; the mesopleurae in the centre above broadly, and below entirely striated; the upper part of the metapleurae coarsely, irregularly reticulated; the rest closely, somewhat strongly, obliquely striated. Stigma, costa, and basal abscissa of radius, rufo-testaceous; there is only one small, somewhat pyriform horny point. Legs densely pilose. The middle lobe of the mesonotum is darker than the latter.

Spilophion, gen. nov.

Transverse median nervure broken shortly, but distinctly, below the middle. Base of radius thickened. Disco-cubital nervure roundly, broadly curved, without a stump; originating before the

discoidal nervure. Transverse median nervure interstitial. Abdomen strongly compressed, more than twice as long as the head and thorax united. Apex of clypeus transverse; labrum projecting, roundly narrowed towards the apex, more than half the length of the clypeus.

This genus has the thickened base of radius of *Pleuroneurophion* and *Enicospilus*; the former may be known from it by the not interstitial transverse basal nervure and by the angled, almost broken disco-cubital nervure; the latter by the presence of blister spots and by the transverse median nervure in hind wings being broken far below the middle. Characteristic are the projecting labrum and the spotted wings.

34.—*Spilophion maculipennis*, sp. nov.

Plate B, fig. 13.

Testaceous, largely marked with yellow; three large marks, narrowly separated, on the mesonotum, apex of metanotum, a large mark, obliquely narrowed at the base, on the lower half of the mesopleuræ, a large ovoid mark on the metapleuræ; the third abdominal segment above and the greater part fifth and sixth black; wings hyaline, the base of radial cellule smoky; the stigma and the nervures black; the former pale at the base; face, oral region, and orbits lemon-yellow; antennæ rufo-testaceous, ♀.

Length 15–17 mm.

Peradeniya, September.

Basal abscissa of radius thickened at the base. Disco-cubital nervure roundly curved downwards, the apex broadly, roundly curved upwards; the cellule bare above, but without horny points. Head smooth and shining, almost entirely yellow. Prothorax and mesothorax impunctate. Scutellum laterally keeled to near the apex. Metanotum behind the keel smooth; the base depressed, with two stout keels in the middle; down the centre of the smooth part is a fine longitudinal keel. The basal part is smooth laterally; the centre with three or four irregular keels; the central stoutly irregularly reticulated, its sides obliquely stoutly striated, the striæ clearly separated; the apical slope has some widely separated irregular longitudinal striæ. Pleuræ smooth and shining.

35.—*Paniscus intermedius*, sp. nov.

Fulvous, the thorax slightly tinged with yellow, the face, oral region, and orbits pale yellow; antennæ rufous, darker towards the apex, wings hyaline, the stigma fuscous, the nervures blackish. Scutellum stoutly keeled, the keels uniting at the apex in a sharply

pointed angle. Areolet oblique, almost appendiculated above; the second nervure largely bullated; the recurrent nervure above and shortly below the middle widely bullated. Disco-cubital nervure roundly, broadly curved, not broken by a stump of a nervure. Transverse median nervure in hind wings broken near the bottom of the upper fourth. Median segment smooth at the base, the rest closely transversely striated, the striae running into reticulations at the apex. Pronotum and mesonotum closely, minutely punctured; parapsidal furrows distinctly defined, especially in the middle. Legs coloured like the body, the anterior paler than the posterior; tarsal joints spinose at the apex and more sparsely on the rest, ♀ and ♂.

Length 10–11 mm.

Maskeliya; Pundalu-oya.

Owing to their uniform colouration the species of *Paniscus* are difficult to define. The present species appears to be sufficiently distinguished from the known Oriental forms by (1) its smaller size; (2) by the transverse median nervure in hind wings being broken higher up, nearer the upper fourth than the upper third as with the others; (3) by the keels on the scutellum uniting in a sharp angle, while in the others they do not unite, but are widely separated. As with the other species the ocellar region is black. The apex of the clypeus is more transverse, less rounded than it is in the other species. The second joint of the hind tarsi is distinctly shorter than the third and fourth united. The temples are little developed and obliquely, sharply, roundly narrowed.

36.—*Paniscus orientalis*, sp. nov

Rufous, the orbits narrowly pale yellow; stigma testaceous, the nervures black. Scutellum more strongly punctured than the mesonotum, whose furrows are distinct on its basal two-thirds only; the scutellar keels are stout and do not unite at the apex. Metanotum smooth at the base only, the rest closely, strongly, transversely striated. Pleuræ closely, distinctly punctured; the lower part of the propleuræ and metapleuræ closely, distinctly, obliquely striated. Transverse median nervure in hind wings broken shortly above the middle; disco-cubital nervure not broken by a stump of a nervure. Ocellar region black. Face strongly and closely, the clypeus sparsely punctured, the apex of the latter bluntly rounded. Wings hyaline, the stigma testaceous, the nervures black. Tarsal spines long, ♀.

Length 13 mm.

The pleuræ are much more strongly punctured than the mesonotum, which is almost smooth.

This is a larger species than *intermedius*, but still smaller than the other Indian species; from *intermedius* it may be known by its

deeper rufous colour; by the transverse median nervure in hind wings being broken lower down, by the scutellar keels not converging at the apex, by the temples being more largely developed and not so obliquely narrowed, and by the metapleural keel being much more broadly developed, especially at the base. Antennæ dark rufous, darker towards the apex.

Pundalu-oya, October.

Paniscus ceylonicus, Cam., is a much larger (nearly 25 mm.) and stouter species than the two I have described here; the stigma is dark fuscous; the disco-cubital nervure is broken distinctly by a stump of a nervure; the recurrent nervure forms two rounded curves, the upper being more broadly rounded, while in those here described it forms one curve only.

37.—*Paniscus lævis*, sp. nov.

Pallid yellow, entirely smooth and shining; the antennæ with a rufous tinge, not darkened towards the apex, wings hyaline, the stigma pallid yellow, the nervures blackish, ♀.

Length 8 mm.

Kandy, July.

This species differs from the other Oriental species in being perfectly smooth, the head and thorax being impunctate and the metanotum not striated. It differs also in the transverse median nervure being received at a greater distance from the transverse basal, and the eyes below are separated by the same distance as they are at the top, while in the others, *e.g.*, *orientalis* and *intermedius*, the distance is clearly greater below than it is above. The parapsidal furrows, too, are much less strongly indicated.

The scutellar keels do not unite at the apex. Apex of clypeus rounded; above it is not separated from the face. There is no malar space, the eyes touching the base of the mandibles. Temples distinct, obliquely narrowed. Transverse median nervure in hind wings broken close to the bottom of the upper fourth, the lower part with a more sharply oblique slope than usual. The antennæ are much more densely pilose than usual, the pile being close, long, and white. The metasternal keel is wider at the base than at the apex. It is a more slenderly built species than the others.

38.—*Campoplex greeni*, sp. nov.

Black, the third, fourth, and fifth abdominal segments red; the apex of the fore femora, tibiæ, and tarsi testaceous; the middle femora near the apex and the tibiæ more broadly at the base,

obscure testaceous ; calcaria dark testaceous. Wings hyaline, the nervures and stigma black, ♀.

Length 10 mm.

Hatton ; Pundalu-oya, February.

Head and thorax thickly covered with silvery pubescence. Head closely punctured. Mandibles uniformly dark rufous including the teeth, their base thickly covered with white pubescence. Palpi dark testaceous. Thorax closely, distinctly punctured, the pleuræ less closely than the mesonotum ; the middle and lower part of the propleuræ with curved, oblique, clearly separated striæ ; the apical central depression on the mesopleuræ closely, regularly striated. On the base of the metanotum are two roundly curved keels, forming two arææ, which are as long as wide ; the centre is depressed and transversely striated closely above, more widely and broadly below. Areolet small, oblique, shortly appendiculated.

39.—*Limnerium taprobanicum*, sp. nov.

Black ; the mandibles and palpi pale testaceous ; the four front legs dark rufous, the coxæ black at the base, trochanters pale yellow ; the hinder darker red, their coxæ and basal joint of trochanters, apex of tibiæ, and the tarsi black ; wings hyaline, the nervures fuscous black ; the stigma paler below, ♀.

Length 6 mm.

Maskeliya.

Head and thorax opaque, covered with white pubescence finely closely punctured. In the centre of the base of the metanotum is a clearly defined area about three times longer than wide and of equal width throughout ; from the apex of this two keels run ; they are at the base roundly curved outwardly, then run obliquely to the outer side of the apical slope, uniting with the pleural keel above the middle of the coxæ. Propleuræ closely, and rather strongly obliquely striated. Areolet shortly appendiculated, 4-angled, its width at the angles as long as its length ; the recurrent nervure is received in the middle.

40.—*Nototrachys reticulatus*, sp. nov.

Black, the four anterior legs and the antennal scape testaceous tinged with fuscous, wings hyaline, the apex slightly fuscous, the nervures and stigma black, ♀.

Length 7-9 mm.

Peradeniya, January.

Antennæ 20-jointed, the last joint as long as the preceding two united, densely covered with a microscopic pile ; testaceous towards the apex ; the first joint of flagellum distinctly longer

than the second. Front and vertex shining, the former transversely finely striated, keeled down the middle. Face and clypeus closely punctured. Mandibles rufous. Mesonotum closely, irregularly reticulated, the sides closely strongly punctured. Scutellum more widely and irregularly reticulated, its sides stoutly keeled. Metanotum reticulated, more widely and distinctly on the basal than on the apical slope; the base bordered by a keel and with a small area, longer than broad and of equal width in the centre. Propleuræ smooth, the apex with a stoutly striated border. Mesopleuræ finely rugose and irregularly obliquely striated. Metapleuræ rugose and irregularly reticulated. Abdomen smooth and shining; the basal two segments as long as the head and thorax united; the first shorter than the second and dilated at the apex.

Transverse basal nervure interstitial; disco-cubital roundly curved; third discoidal cellule at base more than half the width at the apex; transverse median nervure in hind wings unbroken. Hind tarsi longer than tibiæ, claws minute, the calcaria of moderate length; tarsi minutely spinose, slender. Antennæ, slender, as long as the head, thorax, and first segment of the abdomen. Scutellar depression large, wide, deep.

I have, unfortunately, not an example of *Nototrachys* for comparison, but the species I have described agrees fairly well with the descriptions of that genus.

Clatha, gen. nov.

Hind wings with only two cellules, a large anterior, reaching to shortly beyond the middle, and with the apex broadly rounded, and a posterior, not reaching to the middle of the anterior and with its apex straight and slightly oblique. Disco-cubital nervure interstitial with the discoidal, rounded at the base, the third discoidal cellule narrowed and pointed at the base; second discoidal cellule one-third wider at apex than at base. Hind tibiæ as long as the trochanters and femora united, curved and narrowed at the base; the basal joint of the trochanters about four times longer than the apical. Mandibular teeth large, unequal. Hind metatarsus as long as the other joints united.

The transverse median nervure interstitial. Claws small, simple; apex of clypeus rounded. Eyes bare, converging below. Occiput transverse, margined.

This genus comes close to *Agrypon*, Foer., as defined by Ashmead (Bull. U. S. Nat. Mus., XXIII., 89), which apparently is identical with *Atrometus*, Schmied. (Zeits. für Hymen. u. Dipt. 1902, 361) non. Ashm. The total absence of apical nervures in the hind wings should

readily separate the present genus. In them the anterior nervure forms one piece, it being in one continuous rounded curve; the second nervure is joined to it by a transverse nervure. The hind legs are very long.

41.—*Clatha longipes*, sp. nov.

Rufo-testaceous, a line of equal width, enclosing the ocelli, across the vertex, a line on the centre of the mesonotum extending from the base to near the apex, a shorter, broader line on the sides, more irregular in form, not commencing at the base, but reaching to the apex, the scutellar depression, the base and apex of the scutellum, the base of the metanotum, a line down its centre and one of similar size on the sides, a band on the centre of the propleuræ, a smaller one on the mesopleuræ, and one on the base of the metapleuræ, black. Four front legs yellowish testaceous, the hinder black, their coxæ testaceous, with a black line on the outer side. Antennæ filiform, longer than the body, black, the base testaceous below. Wings hyaline, the nervures and stigma black, ♂ (?)

Length to apex of second abdominal segment 9 mm. (the other segments missing).

Kandy, July.

Head smooth and shining; the lower part of the face, clypeus, mandibles, the parts behind and before the ocelli, yellow. Mesonotum and scutellum rugosely punctured; the metanotum closely reticulated. Pleuræ coarsely, rugosely reticulated, the centre of the propleuræ and mesopleuræ striated. Legs densely shortly pilose; the hind femora streaked with testaceous below. The basal two segments of the abdomen are as long as the thorax; are thin, of equal length, and the first is dilated at the apex.

42.—*Trichomma nigricans*, sp. nov.

Black; face, clypeus, mandibles, orbits all round, a broad band narrowed at the base on the pronotum, tegulæ, scutellum, four front coxæ and trochanters, the fore femora and the four front femora and tibiæ anteriorly, the calcaria and the hind coxæ broadly at the base above, yellow. Wings hyaline, the nervures and stigma black, ♀.

Length 16 mm.

Kandy, August.

Head covered with white pubescence, smooth; the front with a striated band which gets narrower below. Mesonotum opaque, the furrows and the part at their apex irregularly reticulated; the apex in the middle finely, closely, transversely striated. Scutellum smooth. Metanotum coarsely reticulated, as are also the pleuræ.

The apex of the propleuræ from above the middle stoutly striated ; the mesopleuræ more finely, closely striated. Thorax except the mesonotum thickly covered with silvery pubescence.

Eyes large, pilose, converging below, incised on inner side, reaching close to the base of the mandibles. Transverse median nervure in hind wings unbroken. Second recurrent nervure received beyond the transverse cubitus ; the transverse median about the same distance beyond the transverse basal. Mesonotal furrows distinct. Second discoidal cellule not much wider at apex than at base ; the third half the width at the base it is at the apex. Scutellum laterally keeled. Mesopleuræ strongly, closely, longitudinally striated. The second discoidal cellule not much wider at the base than at the apex ; the third half the width at the base it is at the apex. Ovipositor half the length of the abdomen. Occiput margin-ed, not quite transverse. Temples not narrowed. Mandibular teeth of equal length. Basal joint of hind trochanters more than twice the length of the apical ; the hind femora narrowed at the base.

TRYPHONINÆ.

43.—*Bassus orientalis*, sp. nov.

Black ; the face, clypeus, mandibles, palpi, the eye orbits to near the ocelli, a large mark on the sides of the mesonotum reaching to the tegulæ, broad in front, becoming gradually narrowed towards the apex, the upper hinder edge of the propleuræ touching the tegulæ, tubercles, tegulæ, scutellum, post-scutellum, and a small triangular mark below the hind wings, lemon-yellow. The apices of the basal three segments of the abdomen narrowly lined with pale yellow ; the apical two lines widely interrupted in the middle. Four front legs yellow, their femora tinged with fulvous ; the hind coxæ yellow, tinged with fulvous ; the femora fulvous ; the hind tibiæ yellow to shortly beyond the middle, the rest of them and the tarsi black. Scape of antennæ yellow, the flagellum brownish beneath. Wings hyaline, the stigma and nervures black, ♂.

Length 6 mm.

Peradeniya.—Bred from Syrphid larvæ feeding on the tea aphids. April.

The lateral sutures bounding the clypeus straight, oblique, the top rounded, the apical half narrowed, the sides roundly curved, the apex slightly, but distinctly roundly incised ; the face and oral region covered with short white pubescence. Vertex punctured but not strongly or closely ; the front less strongly punctured and distinctly furrowed down the centre. Thorax closely punctured ; the metanotum is more closely, more rugosely punctured ; the central apical

part is bounded by a rounded keel and is closely distinctly reticulated. The basal three segments of the abdomen are closely, distinctly, rugosely punctured, as is also the basal half of the fourth and less strongly the basal third of the fifth; the apical half of the fourth is sparsely punctured; in both segments the punctured basal part is bounded by a transverse furrow, there being also a similar furrow on the third and a less distinct one on the second. The raised central part of the first segment of the abdomen is depressed in the centre. The metapleuræ below the keel are smooth, above it rugosely punctured.

Allied to the European *B. multicolor*. The now cosmopolitan, *B. lætatorius*, Gr., probably is found in Ceylon. I have seen it from India, and lately from South Africa.

44.—*Rhorus spinipes*, sp. nov.

Black; face, apex of clypeus, mandibles, malar space, inner orbits, a mark on either side of the mesonotum, the mark triangularly dilated on the inner side at the apex, scutellum, a broad band on the apex of the metanotum, a roundish mark on the upper side of the base of mesopleuræ, a larger quadrangular one on the apex below, the usual mark under the hind wings, the apex of metapleuræ, the mark united to that on the metanotum and the apices of the abdominal segments, yellow. Four front legs yellow, the hind coxæ black, yellow above, the trochanters for the greater part black, femora rufous, tibiæ dark red, blackish at the apex, tarsi black. Wings hyaline, the stigma fuscous, ♀.

Length 7 mm.; terebra 2 mm.

Kandy.

Antennæ longer than the body, the scape marked with yellow, the flagellum brownish below. Smooth and shining; the metanotum obscurely, finely, transversely striated, the basal half furrowed down the middle. Abdomen smooth, shining, densely, shortly pilose. Areolet oblique, triangular, shortly appendiculated. Four hind tibiæ and tarsi thickly spinose.

This is probably not a typical *Rhorus*, but there is no other genus into which I can make it enter. I do not know the type of the genus. In my species the transverse median nervure in hind wings is broken near the bottom, the transverse median nervure is interstitial, and the recurrent nervure is interstitial with the second transverse cubital.

PIMPLINÆ.

45.—*Epirhyssa ornatipes*, sp. nov.

Pale fulvous yellow; the middle of front, the ocellar region, the mark united to the eyes by a black band of equal width throughout,

the occiput in the centre, its black mark united to the black on the vertex by a short line; mesonotum except for a large mark in the centre, longer than broad, of equal width and transverse at the base and apex, post scutellum, a narrow line on the base of metanotum, a large, somewhat triangular mark on the apical half, a line on its apex, a conical mark on the lower side of the propleuræ, the lower side and apex of metapleuræ and bands on the base and apex of the back of the abdominal segments, deep shining black. Wings hyaline, their apex smoky, the nervures and stigma black. Legs coloured like the body, the base of the four hinder trochanters, a broad band on all the femora behind in the centre above, a shorter line on the hinder pair in front; the base and apex of the hind tibiæ broadly and the four hinder tarsi, black, ♂.

Length 10 mm.

Hantane, March.

Antennæ black. Mandibles and the parts at their base black. Head and thorax shining, smooth, except for the usual striation on the mesonotum and the scutellum which is finely transversely striated. Head and pleuræ covered with a short, white pubescence. The black basal and apical bands on the penultimate abdominal segments are united with a black line down the centre. The apical joint of the fore tarsi is black.

46.—*Theronia maskeliæ*, sp. nov.

Pallid yellow, the ocellar region, the mesonotum except for two lines on the basal three-fourths in the centre and the outer side, a mark in the centre of the scutellum, dilated roundly at the apex, the base of the metanotum, narrowly in the centre, broadly at the sides, a large mark roundly narrowed at the apex, incised at the base, and broad bands on the base of the other segments, black. Antennæ stout, as long as the body, black, the scape yellow below, the base of flagellum fuscous. The femora broadly marked with black above, the middle tibiæ infuscated behind; the base of the hind tibiæ and a broad band below it, fuscous black; the four hinder tarsi blackish. Wings clear hyaline, the nervures and stigma black, ♀ and ♂.

Length 10 mm.; terebra 3 mm.

Kandy, August; Maskeliya, April.

Smooth and shining, covered with a short, white down. There is no central area on the base of the metanotum, but two lateral ones, longer than wide, narrowed towards the apex; the outer keel is straight, oblique, the inner rounded; from its outer side a keel runs along the sides of the segment to its apex, there being thus a

large central area extending from the base to the apex of the metanotum, the base being narrowed owing to the basal areae. There is a curved black line on the occiput.

A variable species as regards the size of the black markings. The scutellum may have no black mark; the size of the black lines on the legs varies, that on the hind femora may be cleft, wholly or in part, the pleuræ may be marked with black, and, as is the case with many *Pimplides*, there is a considerable variation in size.

Erythrotheronia, gen. nov.

Median segment areolated, not toothed; the spiracles longer than wide. Scutellum raised, stoutly keeled laterally to near the apex. Abdomen smooth, without furrows. Eyes incised, but not deeply on the inner side; malar space almost absent. Last joint of antennæ shorter than the preceding two united. Areolet oblique, 5-angled; the transverse median nervure interstitial. Transverse median nervure in hind wings broken distinctly above the middle. Temples moderately large, obliquely narrowed. Legs stout; the claws large, edentate.

The type of this genus looks like a red *Xanthopimpla* or *Theronia*. In Dr. Ashmead's system it comes near to the New Zealand genus *Allotheronia*, from which it differs in the regularly areolated, not dentate median segment. *Theronia* and *Neotheronia* differ, *inter alia*, in having pectinated claws.

47.—*Erythrotheronia flavolineata*, sp. nov.

Plate B, fig. 12.

Ferruginous, smooth, and shining; the face, clypeus, mandibles, palpi, lower outer orbits, malar space, lower half of propleuræ, two lines on the mesonotum, inner side of tegulæ, the edges of mesonotum at the base, scutellar keels, apex of scutellum, post-scutellum, apical slope of metanotum, pleuræ except above and the apices of the abdominal segments, yellow. Legs ferruginous, the four anterior coxæ and trochanters yellow, as are also the hinder trochanters. Wings hyaline, with a slight fuscous-violaceous tinge and highly iridescent; the stigma testaceous, the nervures black, ♀ and ♂.

Length 14 mm.; terebra 3 mm.

Kandy, July.

Antennæ black, the scape yellow, the flagellum brownish beneath. Face sparsely, but distinctly punctured, the sides raised. Thorax and abdomen smooth, shining, impunctate; the mesonotum thickly covered with fuscous pubescence. On the base of the metanotum are five large areae, a large central, twice longer than wide, with two

wider than long on either side of it, the basal being the larger, the keel bordering it being broadly rounded at the apex; the apical are widest on the outer side; there is only one larger area on the apical slope, on the sides is a large spiracular area, followed by a much smaller, somewhat triangular one at the apex.

48.—*Echthromorpha ornatipes*, Cam.

Plate B, fig. 8.

This species (described from the Khasia Hills, Assam) has been taken at Peradeniya by Mr. Green.

49.—*Xanthopimpla taprobanica*, sp. nov.

Pale yellow, a triangular mark enclosing the ocelli, a broad band, irregularly trilobate—one on each lobe—across the base of the mesonotum at the tegulæ, a mark on the tegulæ continuous with it, a large transverse mark, roundly curved at the base and extending on to the scutellar depression, a broad band, narrowed in the centre, on the base of the metanotum, two large oblique marks on the centre of the first abdominal segment, dilated in the centre at the base, a small oblique mark, obliquely narrowed at the base and apex on the second, a large broad band on the third, irregularly narrowed laterally and slightly incised in the middle at the base and apex, two large broad bands, rounded on the outer side on the fifth, a broad band on the basal half of the penultimate and two marks on the last, black. Legs coloured like the body; the middle knees, base of middle tarsi, the greater part of hinder trochanters, a broad band on the lower part of the hind femora, apex of femora narrowly above, base of tibiæ, and the tarsi (the middle joints paler in colour), black. Wings hyaline, their apex with a fuscous cloud, ♀.

Length 10 mm.; terebra 2 mm.

Kandy.

Face rugosely punctured; the upper part of the clypeus sparsely punctured. Mesonotum smooth, impunctate; parapsidal furrows reaching shortly beyond the middle. Scutellum roundly convex, the keels not very stout. Areola large, open at the base, transverse at the apex, longer than broad, the sides angled shortly behind the middle; the basal lateral area wider on the outer side, the sides roundly curved; the second large, broad, oblique, of equal width throughout; the apical lateral area triangular; the apex on the outer side, the upper angle longer than the lower. First segment of abdomen in length clearly longer than its width at the apex, smooth, except for some punctures in the middle, the second to

fourth segments closely and strongly punctured, the furrows crenulated. Areolet small, oblique, triangular, shortly appendiculated.

The occiput is immaculate, except that the ocellar black spot slightly projects into it. Pleuræ impunctate. Ovipositor as long as the hind tarsi.

In Professor Krieger's work on *Xanthopimpla* this species would come in near *X. splendens*. Cf. Bericht d. Naturf. Ges. zu Leipzig, 1898, 69.

50.—*Xanthopimpla kandyensis*, sp. nov.

Yellow; the ocellar region, the mark longer than broad, three almost continuous marks on the mesonotum at the base, the central placed more in advance than the others, longer than broad, transverse at the base, rounded behind, the lateral longer compared with the width, more irregular, slightly incised in the middle at the base, rounded and narrowed at the apex; two irregular, slightly oblique marks, narrowed on the inner side, on the first segment; two large marks, broader than long, with the sides rounded, on the third; two somewhat similar ones on the fifth, but broader, more slender compared with the length, and two similar but larger (the largest of all) on the seventh and two marks on the base of the metanotum, broader than long, transverse behind, rounded at the apex, black. Antennæ black, the flagellum brownish, the scape yellow below. Wings clear hyaline, the nervures and stigma black, ♀.

Length 11 mm.; terebra 4 mm.

Kandy, July.

Face and clypeus closely, distinctly, but not very strongly punctured. Thorax smooth and shining. The areola on metanotum broader than long, slightly obliquely narrowed from the apex to the base; the lateral areæ are of almost the same width, the outer side obliquely narrowed; following them is an area which becomes obliquely narrowed from the base on the inner to the apex on the outer. Basal two segments of abdomen smooth, the others closely but not strongly punctured; the furrows closely striated.

The occiput has no black.

Allied to *X. punctata*, F.

51.—*Xanthopimpla parva*, sp. nov.

Pallid yellow, a triangular mark enclosing the ocelli, an irregular transverse line on the base of mesonotum, with ragged edges, a mark at the base of the scutellum, two marks, narrowed from the outer to the inner side, on the base of the metanotum, and marks, broader than long, on the first, third, and following segments, black. Legs coloured like the body, two small marks on the hind trochanters, a

mark on the base of the hind tibiæ, and a smaller one on the base of the hind tarsi, black. Wings clear hyaline, the nervures blackish, δ .

Length 6 mm.

Peradeniya, August.

Face closely punctured. Thorax impunctate; the parapsidal furrows indicated only at the base. There is no central area on the base of the metanotum, but two semicircular large lateral ones enclosing the black spots; there is none on the apex. The basal two abdominal segments smooth; the furrows striated; the other segments are closely punctured. The apex of the wings slightly infuscated. Base of mesonotum rounded.

This and the following species are very much smaller than any of those described hitherto.

52.—*Xanthopimpla minuta*, sp. nov.

Yellow; a triangular mark enclosing the ocelli, the scutellar depression, two marks on the first abdominal segment, a transverse line on the third, two closely continuous ones on the fourth, two more widely separated ones on the fifth, two still more widely separated marks on the sixth, and a line on the seventh, black. The base of the hind tibiæ marked with black. Wings hyaline, the nervures and stigma black, ♀.

Length 5 mm.

Kandy, July.

Face minutely punctured. Base of mesonotum transverse, the parapsidal furrows distinct, the middle lobe clearly separated. Smooth and shining. There is no area on the base of metanotum; there is a clearly defined lateral area, broader than long, broad on the outer, becoming gradually narrowed to a fine point on the inner side; the sides of the metanotum are keeled. Abdomen closely punctured, with distinct, striated furrows. The apical half of the first segment is raised, clearly separated, smooth, of equal width and twice longer than wide. Antennal scape for the greater part yellow, the flagellum brownish beneath. The antennæ are clearly longer than the body. The ovipositor short.

This species can easily be distinguished from *X. parva* by the distinct parapsidal furrows and by the mesonotum being transverse, not rounded at the base.

Philopsyche, gen. nov.

Eyes very large, reaching to the base of the mandibles, there being no malar space; on the inner side they are distinctly incised. Face keeled down the middle, clearly separated from the clypeus by a

furrow; the extreme apex of clypeus depressed, not quite transverse. Last joint of antennæ as long as the preceding two united. Scutellum roundly convex. Transverse median nervure in hind wings broken far below the middle. Areolet triangular, small, appendiculated. Transverse median nervure in fore wings placed immediately behind the transverse basal, almost interstitial. Abdomen and legs as in *Pimpla*. Metathoracic spiracles round. Claws slender, curved, untoothed. The sharp lateral ridges of the mesonotum do not extend on to the scutellum. The eyes do not converge anteriorly. The last joint of hind tarsi about three times longer than the preceding.

If the apex of the clypeus is to be considered "impressed anteriorly at apex" this genus, in Dr. Ashmead's arrangement, would come in near *Itopectis* and *Eremochila*, with neither of which can it be confounded; if "not impressed" then it would come nearest to *Tromatobia*, which is easily known from it by the entire eyes. The metapleural keel is distinct, complete. The disco-cubital nervure is angled beyond the middle, but not broken by the stump of a nervure. The genus should be readily known by the large, clearly incised eyes, reaching close to the base of the mandibles, round metathoracic spiracles, angled disco-cubital nervure, transverse median nervure in hind wings broken near the bottom, and smooth, white-banded apex of abdominal segments

53.—*Philopsyche albobalteata*, sp. nov.

Plate B, fig. 10.

Black; the antennal scape except above, palpi, hind edge of pronotum, tegulæ, and the apices of the basal six abdominal segments, white. Four front legs white, the hind coxæ and femora red; the basal joint of trochanters red, the apical white; the hind tibiæ at extreme base, and broadly in the middle, white, the rest black; the hind tarsi black, the basal joint white to near the apex, δ .

Length 7–8 mm

Bred from *Psyche albipes* and *P. subteralbata*.

Matale; Peradeniya, August.

Head smooth and shining, the face covered with white, the clypeus with longer white hair; the former obscurely shagreened. Mesonotum and scutellum closely punctured, thickly covered with white pubescence. Metanotum smooth, shining, and bare at the base and apex, the middle punctured and thickly covered with long white hair. Abdomen closely and strongly punctured except on the white apices of the segments and thickly covered with black pubescence. Pleuræ smooth, almost bare, except on the metapleuræ above the keel.

Lissotheronia, gen. nov.

Abdominal segments broader than long, perfectly smooth, shining, impunctate; the first segment bituberculate at the base. Median segment strongly, closely, transversely striated, the spiracles about three times longer than wide, broader below than above. Eyes large, incised on the inner side; malar space small. Clypeus clearly separated, its apex obliquely depressed. Transverse median nervure in hind wings broken distinctly above the middle. Transverse median nervure received beyond the transverse basal. Discocubital nervure broadly rounded, unbroken. Claws simple; tarsi thickly spinose. Antennæ slender, longer than the body, the last joint nearly as long as the preceding two united.

This genus might be mistaken for a *Pimpla*, from which, however, it can be readily known by the perfectly smooth, shining abdomen. In Dr. Ashmead's system it would come in near *Allotheronia*, which may be known from it by the metathorax having a strong transverse apical area, with the upper angles dentate or tuberculate, the whole thorax, too, being "closely, finely, rugosely punctate" except for a spot on the middle of the mesopleuræ. It has the metanotum closely transversely striated as in *Lissopimpla*, having also the smooth abdomen of that genus; but otherwise is readily separated from it by the absence of parapsidal furrows and of a tooth on the hind femora.

54.—*Lissotheronia flavipes*, sp. nov.

Black, shining, except the median segment which is closely striated, the pleuræ more closely and obliquely than the dorsal surface; the legs yellow, except the fore coxæ in the middle below, and the four hind coxæ and trochanters, which are black; wings hyaline, slightly suffused with yellow. A spot on the scutellum in the centre, a curved one on the post-scutellum, and one on the base of the tegulæ are yellow. The depressed apex of the clypeus is smooth and shining; the raised upper part sparsely punctured. Face closely punctured; the sides of the lower part roundly convex. Tarsi spinose, much longer than the tibiæ. Sternum and under side of coxæ thickly covered with fulvous pubescence, ♀.

Length 15 mm.; terebra 4 mm.

Pundalu-oya, February.

55.—*Charitopimpla annulipes*, sp. nov.

Plate B, fig. 9.

Black; antennal scape except above, tegulæ, hind edge of pronotum, and palpi, yellow; the apex of the abdominal segments narrowly yellow; the yellow lines dilated at the sides and tinged with rufous

there. Four anterior legs yellow, tinged slightly with rufous; the hind coxæ and femora rufous, their trochanters yellow; hind tibiæ black, their base narrowly and the middle broadly white; hind tarsi black, the metatarsus to near the apex black. Wings hyaline, the nervures and stigma black, the areolet small, triangular, with a long pedicle, it being as long as the branch of the first transverse cubital nervure, ♀.

Length 12 mm.; terebra 5 mm.

Pundalu-oya.

Face sparsely pilose and punctured, the middle keeled. Apex of clypeus brown round the central incision. Mandibular teeth piceous. Front and vertex smooth and shining. Prothorax smooth, except along the upper edges. Mesothorax and metathorax closely punctured, thickly covered with pale pubescence; on the metanotum the pubescence is longer and more fulvous in tint. Except at the apices of the segments the back of the abdomen is closely and strongly punctured; the apical segments are only slightly punctured.

The antennæ are stout, as long as the abdomen; the last joint is as long as the preceding two joints united. The apices of the tarsal joints are spinose. The metapleuræ below the keel are smooth. The hind coxæ below and the extreme apex of the hind femora are black.

Charitopimpla was described by me in the Journ. Str. Br. Royal Asiatic Society, 1902, 48.

56.—*Lissopimpla rufipes*, sp. nov.

Plate B, fig. 14.

Black; the upper orbits broadly, the outer narrowly above, broadly below, the malar space, face, clypeus, labrum, mandibles, palpi, a raised line on the basal half of the pronotum, interrupted by the parapsidal furrows, a mark on the apex of the middle lobe of the mesonotum, transverse at the base, gradually roundly narrowed to the apex, scutellar keels to shortly beyond the middle, the apex of scutellum, the lateral keels, post-scutellum, the three tubercles on the apex of metanotum, a line on either side of the base of pronotum, the lower edge of propleuræ, tubercles, a small roundish mark on the base of mesopleuræ above the middle, the basal half below, a large mark, roundly narrowed at the apex, obliquely truncated at the base on the apex of the metapleuræ, the apex above the hind coxæ, two narrow lines on the centre of the first abdominal segment and about the apical third of the others, yellow. Legs rufous, the four coxæ and trochanters yellowish, the apex of the hind coxæ marked with black, as is also the base. Wings clear hyaline, highly

iridescent, the nervures and stigma black or fuscous black. The hind tibiæ are darker coloured, the hind tarsi fuscous, ♀.

Length 9-12 mm.; terebra 3-4 mm.

Maskeliya, April; Peradeniya, August.

Antennæ longer than the body, slender; the 8-12 joints of flagellum white. Labrum and clypeus closely and rather strongly punctured. Face depressed, stoutly keeled in the centre, the sides of the depression roundly curved. Prothorax and mesothorax smooth, shining; the pleural sutures closely striated. Metanotum, except in the centre at the base, closely transversely, the upper part of the metapleuræ obliquely, striated. Areolet, as in the typical species of the genus, oblique, the nervures uniting above. Femoral tooth small, but distinct.

The occurrence of *Lissopimpla* in Ceylon is of great interest, the genus hitherto having been regarded as Australian.

Tanera, gen. nov.

Abdominal petiole long and slender, narrowed at the base, as long as the following two segments united; the segments smooth and shining, longer than wide; there is a projecting ovipositor. Median segment uniformly coriaceous, without a transverse keel; there is a stout metapleural keel. Legs slender; the claws not pectinated; hind coxæ three times longer than wide. Areolet with a long pedicle, the cubital nervures roundly curved; the recurrent nervure is received at its apex; transverse median nervure received behind the transverse basal. Clypeus roundly convex, separated from the face; its apex broadly rounded. Occiput transverse; the ocelli placed close to the edge. Temples very short, almost obsolete behind the eyes. Antennæ nearly as long as the body; the last joint longer than the penultimate, but not so long as the preceding two united.

The eyes are large, converging slightly above; there is a distinct malar space; the ocelli are on the outer edge of the vertex. The keel on the edge of the metasternum projects at the apex into a distinct tooth. Metathoracic spiracles small, oval. The abdominal petiole is longer, more slender and narrower at the base than it is in *Lissonota*. If it is to be called "sessile," in Ashmead's table (U. S. Nat. Mus. XXIII., 49) it would fit in near *Trevoria*, with which it cannot be confounded; if "petiolate" then it would come in near *Atropa*.

57.—*Tanera annulipes*, sp. nov.

Plate B, fig. 11.

Black, smooth, and shining, except the pleuræ and metanotum, which are closely and strongly punctured; the latter more coarsely

than the former ; the clypeus, mandibles, palpi, a spot on the malar space, the inner orbits, more broadly above than below, scutellum, a line on the centre of the pronotum, tegulae, tubercles, the apex of metapleuræ ; the basal third of the first abdominal segment, about the basal third of the second and third, the apex of the third more narrowly, and the apical segments, yellow. Legs rufous, the four front coxæ and trochanters tinged with yellow ; the hind tibiæ and tarsi fuscous, tinged with rufous, their base white. Wings hyaline, the apex of the radial and of the third cubital smoky ; the stigma fuscous, ♀.

Length 8 mm. ; terebra 5 mm.

Hatton.

58.—*Lissonota greeni*, sp. nov.

Black ; the clypeus broadly at the apex, more broadly in the centre, mandibles except the teeth, palpi, underside of the antennal scape, and the lower edge of the propleuræ, yellow ; first abdominal segment, basal third of the second, the base of the third narrowly, and of the fourth still more narrowly, red ; the apices of the second and third yellow, tinged with rufous. Legs red ; the anterior coxæ and trochanters and the middle coxæ at the base, yellow ; the hind tibiæ and tarsi black. Wings hyaline, the stigma and nervures dark fuscous, ♀.

Length 8 mm. ; terebra 5 mm.

Peradeniya, March.

Closely and regularly punctured. First segment of abdomen closely, distinctly, longitudinally striated, except in the middle at the apex ; the second and third segments and the base of the fourth closely and regularly punctured ; the apical smooth and shining ; the last and the apex of the penultimate white. Areolet not appendiculated.
